

21. In Section 80.371 the introductory portion of paragraph (c) is revised, paragraphs (d) and (e) are redesignated as (e) and (f) respectively, and new paragraphs (d) is added to read as follows:

§ 80.371 Public correspondence frequencies.

* * * * *

(c) Working frequencies in the marine VHF 156-162 MHz band. Initial grants may be made for more than one working frequency. An application for more than one working frequency must be accompanied by a factual showing that the frequency or frequencies will be used to provide service to ship stations.

(d) Additional frequencies in 156-162 MHz band. This paragraph describes frequencies available to public coast stations on a shared basis with the Railroad Radio Service and the Motor Carrier Radio Service.

(1) Assignment will be made only when VHF frequencies available for assignment under paragraph (c) of this section are not available or are unusable and the public coast station is to be located within 16 km (10 miles) of a navigable waterway. Applicants must comply with Subpart P and the protection criteria listed below.

Frequencies in the 156-162 MHz Band		
	Carrier frequency (MHz)	
	Ship transmit	Coast transmit
	Points of communication (between coast and ship unless otherwise indicated)	

159.500	161.375
159.525	161.400
159.550 ¹	161.425
159.575 ¹	161.450
159.600 ¹	161.475
159.625	161.500
159.650	161.525
159.675	161.550

¹ These may also be used for intership communications when using 1 watt or less transmitter power.

(2) Station power, as measured at the output terminals of the transmitter, must not exceed 50 watts for coast stations, 25 watts for marine mobile stations, and 20 watts for land mobile stations. Antenna height (AAT) must not exceed 122 meters (400 feet) for coast stations and 4.5 meters (15 feet) for land mobile stations. Such base and mobile stations must not be operated on board aircraft in flight.

(3) Public coast station licensees may operate on frequencies 12.5 kHz offset from the assignable channels specified in paragraph (d)(1) of this section provided such licensees are also licensed for channels on each side of the offset frequency. Licensees using offset frequencies must comply with all other conditions of operation.

(4) The following table, along with the antenna height (AAT) and power (ERP), must be used to determine the minimum separation required between proposed public coast stations and co-channel Railroad Service base stations. Transmissions are considered co-channel where the Railroad Service station's authorized frequency is less than 20 kHz from the coast station's authorized frequency. Applicants whose exact ERP or HAAT are not reflected in the table must use the next highest figure shown.

**REQUIRED SEPARATION IN KILOMETERS (MILES) OF COAST STATION
FROM RAILROAD SERVICE BASE STATIONS**

Coast Station

HAAT	ERP (watts)				
meters (feet)	400	300	200	100	50
15 (50)	138 (86)	135 (84)	129 (80)	121 (75)	116 (72)
30 (100)	154 (96)	151 (94)	145 (90)	137 (85)	130 (81)
61 (200)	166 (103)	167 (104)	161 (100)	153 (95)	145 (90)
122 (400)	187 (116)	183 (114)	177 (110)	169 (105)	159 (99)

(5) Public coast stations must additionally be located more than 80 km (50 miles) from any co-channel Motor Carrier base station. Transmissions are considered co-channel where the Motor Carrier station's authorized frequency is less than 20 kHz from the coast station's authorized frequency.

(6) The Commission may require, without a hearing, licensees of public coast stations authorized under this section that are located within 240 kilometers (150 miles) of an existing co-channel Motor Carrier base station, Railroad Service base station or international border to reduce radiated power, decrease antenna height, and/or install directional antennas in the event harmful interference should occur. Mobile stations must operate only within radio range of their associated base station unless otherwise permitted to do so.

* * * * *

22. In Section 80.373, paragraph (c)(1) is revised and the table in paragraph (f) is revised by removing the Commercial and Noncommercial entries, revising footnote 1, revising the third sentence in footnote 8, amending footnote 16, adding a new footnote 17 and adding a new entry titled "Vessel Operations" after "Navigational (Bridge-to-Bridge)", and changing footnote 14 to 15 on the entry for 70 in the entry titled "Digital Selective Calling" to read as follows:

§ 80.373 Private communications frequencies.

* * * * *

(c) * * *

(1) The simplex frequencies in the table below are available for assignment to private coast stations for business and operational radiotelephone communications. In addition, the frequencies listed in § 80.371(a) are also available for regional simplex communications, as specified in the table, for assignment to private coast stations for business and operational

radiotelephone communications.

* * * * *

(f) * * *

Frequencies in the 156-162 MHz Band

	Carrier frequency (MHz)		Points of communication (between coast and ship unless otherwise indicated)
	Ship transmit	Coast transmit	

* * * * *

Navigational (Bridge-to-Bridge)⁵

* * * * *

Vessel Operations

01A ¹	156.050	156.050	Intership only. Do.
63A ¹	156.175	156.175	
07A.....	156.350	156.350	
67 ^{7, 14}	156.375	
08.....	156.400	
68 ¹⁷	156.425	156.425	
09 ¹⁶	156.450	156.450	
69.....	156.475	156.475	
10.....	156.500	156.500	Intership only.
11 ³	156.550	156.550	
71.....	156.575	156.575	
72.....	156.625	
18A.....	156.900	156.900	
78A.....	156.925	156.925	
19A.....	156.950	156.950	
79A.....	156.975	156.975	
80A.....	157.025	157.025	Intership only.
88A ⁸	157.425	

Digital Selective Calling

* * * * *

70¹⁵..... | 156.525 | 156.525

¹ 156.050 MHz and 156.175 MHz are available for port operations and vessel operations purposes when used only within the U.S. Coast Guard designated Vessel Traffic Services (VTS) area of New Orleans, on the lower Mississippi River from the various pass entrances in

the Gulf of Mexico to Devil's Swamp Light at River Mile 242.4 above head of passes near Baton Rouge.

* * * * *

³ 156.550 MHz, 156.600 MHz and 156.700 MHz are available in the U.S. Coast Guard designated port areas only for VTS communications and in the Great Lakes available primarily for communications relating to the movement of ships in sectors designated by the St. Lawrence Seaway Development Corporation or the U.S. Coast Guard. The use of these frequencies outside VTS and ship movement sector protected areas is permitted provided they cause no interference to VTS and ship movement communications in their respective designated sectors.

* * * * *

⁵ 156.375 MHz and 156.650 MHz are available primarily for intership navigation communications. These frequencies are available between coast and ship on a secondary basis when used on or in the vicinity of locks or drawbridges. Normal output power must not exceed 1 watt. Maximum output power must not exceed 10 watts for coast stations or 25 watts for ship stations.

* * * * *

⁷ Use of 156.375 MHz is available for navigational communications only in the Mississippi River from South Pass Lighted Whistle Buoy "2" and Southwest Pass entrance Mid-channel Lighted Whistle Buoy to mile 242.4 above head of Passes near Baton Rouge, and in addition over the full length of the Mississippi River-Gulf Outlet Canal from entrance to its junction with the Inner Harbor Navigation Canal, and over the full length of the Inner Harbor Navigation Canal from its junction with the Mississippi River to its entry to Lake Pontchartrain at the New Seabrook vehicular bridge.

⁸ * * * More than 75 miles from the United States/Canada border in the area of the Puget Sound and the Strait of Juan de Fuca, its approaches, the Great Lakes, and the St. Lawrence Seaway, 157.425 MHz is available for intership and vessel operations communications. * * *

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¹⁵ The frequency 156.450 MHz is to be used exclusively for distress, safety and calling using digital selective calling techniques. No other uses are permitted.

¹⁶ The frequency 156.450 MHz is also available for intership, ship and coast general purpose calling by voluntarily equipped vessels, such as recreational boats, and coast stations.

¹⁷ In Alaska, 156.425 MHz may be used by private coast stations and ship stations for facsimile as well as voice communications.

23. Section 80.405 is amended by revising the third sentence of paragraph (c) to read as follows:

§ 80.405 Station license.

* * * * *

(c) * * * When the station license cannot be posted as in the case of a marine utility station operating at temporary unspecified locations or the ship or recreational boat does not have an enclosed wheelhouse, it must be kept where it will be readily available for

inspection. * * *

24. Section 80.453 is amended by adding paragraph (a)(4) to read as follows:

§ 80.453 Scope of communications.

* * * * *

(a)(3) * * *

(4) With vehicles on land in accordance with § 80.123;

* * * * *

25. Section 80.477 is amended by revising the heading and paragraph (a) to read as follows:

§ 80.477 AMTS points of communication.

(a) AMTS coast stations may communicate with fixed platform stations located in the offshore waters of the Gulf of Mexico, with ship stations, and with land vehicles in accordance with § 80.123.

* * * * *

26. Section 80.479 is amended by revising the first sentence of paragraph (a) to read as follows:

§ 80.479 Assignment and use of frequencies for AMTS.

(a) The limitations and frequencies assignable to AMTS stations are listed in Subpart H of this Part. * * *

27. Section 80.505 is amended by adding a new paragraph (d) to read as follows:

§ 80.505 Points of communication.

* * * * *

(d) An associated coast station unit is restricted to communications with private coast stations with which they are associated and with vessels served by the private coast stations with which they are associated, for the purpose of safe and expeditious conduct of the business of the private coast station licensee.

28. Section 80.507 is amended by revising paragraph (c) to read as follows:

§ 80.507 Scope of service.

* * * * *

(c) Each marine utility station or associated coast station unit on shore must be

operated as a private coast station except that it may be operated at temporary unspecified locations. Marine utility stations and associated coast station units on ships are operated as ship stations.

29. Section 80.511 is amended by adding a new paragraph (d) to read as follows:

§ 80.511 Assignment limitations.

* * * * *

(d) An associated coast station unit may operate only on the frequencies assigned to the private coast station with which the unit is associated.

30. Section 80.519 is amended by revising paragraph (b) to read as follows:

§ 80.519 Station identification.

* * * * *

(b) Marine utility stations, associated coast station units or private coast stations when exchanging communications with marine utility stations or associated coast station units may be identified by a unit identifier in lieu of the call sign. Identification by transmission of the assigned call sign must be at the end of the exchange or at least once every 15 minutes.

31. Section 80.653 is amended by revising paragraph (b)(2) to read as follows:

§ 80.653 Scope of communications.

* * * * *

(b)* * *

(2) Transmissions necessary for the test and maintenance of maritime radio equipment at repair shops and at temporary unspecified locations;

* * * * *

Part 87 - Aviation Services

1. The authority citation for Part 87 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, unless otherwise noted. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-156, 301-609.

2. Section 87.27 is amended by revising paragraphs (a) and (b) to read as follows:

§ 87.27 License term.

(a) Licenses for aircraft stations will normally be issued for a term of ten years from the date of original issuance, major modification or renewal. Licensees may apply for renewal of the station license up to ninety (90) days from the date the license expires.

(b) Licenses other than aircraft stations in the aviation services will normally be issued for a term of five years from the date of original issuance, major modification, or renewal. Licensees, other than Aeronautical Advisory (unicom) stations licensed under § 87.215(b), Aeronautical Fixed, Aeronautical Enroute, and Airport Control Tower stations, may apply for renewal of the station license up to ninety days from the date the license expires.

* * * * *

3. In Section 87.131, the table is amended by adding a new footnote 9 to read as follows:

§ 87.131 Power and emissions.

* * * * *

Class of station	Frequency band/frequency	Authorized Emission(s) ⁹	Maximum power ¹
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* * * * *

¹ The power is measured at the transmitter output terminals and the type of power is determined according to the emission designator as follows:

(i) Mean power (pY) for amplitude modulated emissions and transmitting both sidebands using unmodulated full carrier.

(ii) Peak envelope power (pX) for all emission designators other than those referred to in paragraph (i) of this note.

* * * * *

⁹ Excludes automatic link establishment.

* * * * *

4. A new Section 87.149 is added to read as follows:

§ 87.149 Special requirements for automatic link establishment (ALE).

Brief signalling for the purposes of measuring the quality of a radio channel and thereafter establishing communication shall be permitted within the 2,000 kHz - 27,500 kHz band under the following conditions:

- a) The transmitter power shall not exceed 100 W ERP;
- b) Transmissions must sweep linearly in frequency at a rate of at least 60 kHz per second, occupying any 3 kHz bandwidth for less than 50 milliseconds;
- c) The transmitter shall scan the band no more than four times per hour;
- d) Transmissions within 6 kHz of the following protected frequencies and frequency bands must not exceed 10 μ W peak ERP:

i) Protected frequencies (kHz)

2091.0	4188.0	6312.0	12290.0	16420.0
2174.5	4207.5	8257.0	12392.0	16522.0
2182.0	5000.0	8291.0	12520.0	16695.0
2187.5	5167.5	8357.5	12563.0	16750.0
2500.0	5680.0	8364.0	12577.0	16804.5
3023.0	6215.0	8375.0	15000.0	20000.0
4000.0	6268.0	8414.5	16000.0	25000.0
4177.5	6282.0	10000.0		

ii) Protected bands (kHz)

4125.0-4128.0
8376.25-8386.75
13360.0-13410.0
25500.0-25670.0

- e) The instantaneous signal, which refers to the peak power that would be measured with the frequency sweep stopped, along with spurious emissions generated from the sweeping signal, must be attenuated below the peak carrier power (in watts) as follows:

- i) On any frequency more than 5 Hz from the instantaneous carrier frequency, at least 3 dB,
- ii) On any frequency more than 250 Hz from the instantaneous carrier frequency, at least 40 dB, and
- iii) On any frequency more than 7.5 kHz from the instantaneous carrier frequency, at least $43 + 10\log_{10}(\text{peak power in watts})$ db.

Part 90 - Private Land Mobile Radio Services

1. The authority citation for Part 90 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303 and 332, unless otherwise noted.

2. In Section 90.89, the table in paragraph (b) is amended by revising the entry for "150-170" and adding paragraph (c)(23) to read as follows:

§ 90.89 Motor Carrier Radio Service.

* * * * *

(b) * * *

Motor Carrier Radio Service Frequency Table

Frequency or band	Class of station(s)	Limitations
* * * * * 150-170..... * * * * *	Base or mobile.....	21,23

(c) * * *

(23) The frequencies in the band 159.4875 - 159.6875 MHz are shared with stations in the maritime service under the terms of operation described in § 80.371(d) of this Chapter.

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3. In Section 90.91, the table in paragraph (b) is amended by revising the entry for "150-170" and adding paragraph (c) (22) to read as follows:

§ 90.91 Railroad Radio Service.

* * * * *

(b) * * *

Railroad Radio Service Frequency Table

Frequency or band	Class of station(s)	Limitations
* * * * *		
150-170.....	Base or mobile.....	18,22
* * * * *		

(c) * * *

(22) The frequencies in the band 161.3625 - 161.5625 MHz are shared with stations in the maritime service under the terms of operation described in § 80.371(d) of this Chapter.

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